uable addition to the food supply of the West Coast. It seems strange that some of the conchologists or collectors should not have detected the *Urosalpinx* before; for while, no doubt it multiplies rapidly under favorable conditions, still the abundance of this form as shown by Mr. Townsend's investigation, indicates that it must have been on the Belmont beds for several years. The common *Purpura* of the coast, *P. crispata* has heretofore been found in considerable numbers on some of the oyster beds in San Francisco Bay. How it compares with the *drill*, as an oyster borer and pest to the oyster men, I have not learned.

We may reasonably look forward to the finding of a third eastern species, as an accidental or incidental transplantation; it may be already established there, in some of the beds of eastern oysters. I refer to the ribbed Mytilus, M. hamatus Say, which is so frequently met with here, attached to Ostrea virginica. Mr. Townsend or some of the local naturalists, should look after it—if not there now, it will be sooner or later.

Washington, D. C., March, 1894.

A FEW NOTES ON HELIX APPRESSA.

BY A. G. WETHERLY.

In the April Nautilus, Mr. Pilsbry has given us his description of Triodopsis appressa, and named a variety thereof, perigrapta. As I am at war in a good humored way, with the modern habit of designating the hundreds of varieties of our land shells by latin names, I hope to make my reasons plain in the following brief note. Referring to, but not copying Pilsbry's description of perigrapta, I will say that I have shells in my collection exhibiting every gradation of the sculpture in question, from a few "spiral incised lines" in specimens from Cherokee Co., N. C., to those in which these lines are not only crowded, but much more pronounced individually; and as these specimens are heavily ribbed, they aid in giving some parts of the surface of the shell a headed appearance.

Every gradation may be traced in the specimens which I have, from the smooth albino form found at Cincinnati, Ohio, to those rough mountaineers from Morrowville, Tenn. Where then, does

perigrapta begin and where does it stop? Any of these varieties is just as much entitled to name as is the one selected for this honor. Among the rest is a large var., 23 mm., from Lookout Mt., Tenn. This variety is almost smooth or very sparingly costate. It is slightly wrinkled like Z. inornatus. But it is crowded with these incised lines above and below!

Another form that I collected at Gasper, Picking Co., Ga., in August, '83, is very costate, and has the incised lines very much crowded and developed. The Lookout shells have the parietal tooth long, curving, and joining the columellar callus in the umbilical region. The Gasper specimens have this tooth short and very erect. They also have the lip very much widened, and the spire elevated. I have, in my suite of this species, four shells, taken at random from a lot collected at Murphy, Cherokee Co., N. C., in every one of which the upper tooth is well indicated, the parietal tooth is short and erect, the spire elevated, the body whorl obtusely carinate and the whole surface above and below is crowded with "microscopic spiral incised lines." Now which is perigrapta? The deep costa and the multitude of spiral incised lines roughen the epidermis of the Morrowville examples and begin to introduce the conditions attaining in subpalliata. These shells, in consequence, have a somewhat dull appearance, while the Lookout Mt. and Cherokee Co. specimens are highly polished.

A variety from Braden Mt., Tenn., is heavily costate, and has the spiral lines (as has every shell of appressa) but not "incised." These shells range from 12 mm. to 25 mm. (my largest specimen of sargentiana). This last form is costate, has the erect tooth, the carinate body whorl, and the spiral lines, not "incised," and is in fact nearer to the typical appressa, in every aspect, than the highly polished and shining specimens from N. C.

Now what is the philosophic method in treating such a problem? Is it to give all these varieties names, loading up our literature and check lists with trinominal designation for varieties that differ in the same County of the same State? Or shall we write our labels appressa var. with locus and so on to the end? There is at least one collection in the U.S. where the latter method prevails and will to the end. I am tempted, in this place, to prune and reset Mr. Pilsbry's phylogenic tree according to my ideas, but I will not take space for so doing now. I do not, however, believe that dentifera is the root or that the branches sargentiana, appressa and perigrapta

are of equal specific rank, or that two of them are of any specific rank whatever; and I base my statement not only upon the varieties of this species here briefly mentioned, but upon many others in my collection, from many States and mostly collected by myself.¹

Why do we not take to our heart of hearts the great truth that there are no hard and fast lines in Nature's record either present or past, and hold close the splendid proof given by this shell?

The foreign student who has not seen all our shells can tell nothing by these names, but if he knows appressa he will have the truth suggested by appressa, etc. So, too, our catalogues will be something besides names and nobis! They will be expressive of facts in the life history of this humble race.

This is the method that appeals to me as the scientific, the truthful, the suggestive method; and I shall never cease to believe in it and to work for it.

NOTICES OF NEW JAPANESE MOLLUSKS, III.

BY H. A. PILSBRY.

Siphonaria acmæoides n. sp.

Shell oblong, nearly equilateral, but with excentric apex like S. radiata A. & R. (Zool. Samarang pl. 13, fig. 2). The even surface hardly modified by the 9-16 low, wide ribs, between which it is very finely radially striated. Siphonal rib wide but low and inconspicuous. Apex spiral, bent down and appressed. Interior blackish or chestnut within the muscle impression, outside of which it is radially striped black and white, the siphonal channel extremely shallow and inconspicuous. Color outside whitish-buff, speckled and maculated with brown, or whitish on the principal ribs, the intervals black-brown. Length 12\frac{3}{4}, breadth 9\frac{1}{2}, alt. 3\frac{1}{2} mm.

Prov. Boshiu, Japan (Frederick Stearns).

This little species very closely resembles Acmaa Heroldi in the general form and the coloration of the interior.

¹ Mr. Pilsbry intended appressa, not dentifera for the root, in his diagram. The "tree" is seen from above, not from the side.—Ed.